

IN THE SPECIFICATION:

Please amend the specification as follows:

Page 2, 4th paragraph:

One part of the subject-matter of the invention therefore relates to a polynucleotide which encodes the PRV-1 gene and essentially comprises the ~~sequence No. 4~~ SEQ ID NO:1. The polynucleotides of the present invention can be single-stranded or double-stranded DNA or RNA. If they are RNA, it is then clear to the skilled person that "U" nucleotides are present in place of "T" nucleotides. "Polynucleotide" is understood as meaning nucleic acids which contain 15 or more nucleotides.

In the paragraph bridging pages 2 and 3 of the specification:

The nucleotide sequence according to the invention is depicted in ~~FIG. 4~~ SEQ ID NO:1. The invention therefore relates to a polynucleotide which corresponds to the sequence shown in ~~FIG. 4~~ SEQ ID NO:1 and also to a polynucleotide whose nucleotide sequence exhibits minor differences. Within the meaning of the present application, minor differences are understood as meaning those sequences in which a few, preferably not more than 50 and particularly preferably not more than 25, nucleotides can be exchanged, with, however, the function of the gene encoded by the nucleotide sequence being unaffected. The skilled person is familiar with the fact that a base triplet encoding an amino acid can be replaced with another triplet which encodes the same amino acid. In addition to this, regions which are of less importance can be deleted and/or mutated to a minor extent. In a particular embodiment, the polynucleotide comprises nucleotides 36 to 1346 of ~~sequence No. 4~~ SEQ ID NO:1, that is the coding region of the PRV-1 gene. Another embodiment comprises nucleotides 36 to 1262 of ~~sequence No. 4~~ SEQ ID NO:1. This region presumably encodes the active region of the PRV-1 polypeptide. Finally, the polynucleotide of the invention can also comprise nucleotides 39 to 1346 or 39 to 1262 of ~~sequence No. 4~~ SEQ ID NO:1, such that the codon which encodes the starting methionine is not present. A preferred

embodiment is a polynucleotide which comprises nucleotides 99-1346 or 99 to 1262 of ~~sequence No. 1~~ SEQ ID NO:1. This results in the codons at the 5' end which encode the signal peptide of the PRV-1 polypeptide not being present.

Page 4, 1st and 2nd paragraphs:

The PRV-1 gene encodes a protein which exhibits the protein sequence shown in ~~FIG. 2~~ SEQ ID NO:2. The signal peptide, which is present in the protein sequence of all surface molecules and normally removed when the protein is processed, is divided off by a hyphen. The protein has the ~~sequence No. 2~~ SEQ ID NO:2. Another aspect of the invention is consequently an essentially pure polypeptide having the ~~sequence No. 2~~ SEQ ID NO:2 or a polypeptide having the ~~sequence No. 2~~ SEQ ID NO:2 but lacking the signal peptide (i.e. amino acids 22 to 437 of ~~sequence No. 2~~ SEQ ID NO:2). Other embodiments encompass amino acids 1 to 409 or 22 to 409 of ~~sequence No. 2~~ SEQ ID NO:2 (what is probably the active region of the protein).

With regard to biological activity, the polypeptide according to the invention is preferably glycosylated; it is most preferably N-glycosylated. It can then be glycosylated at at least one of the amino acids Asn-46, Asn-189 and Asn-382 of the PRV-1 polypeptide (the amino acid numbers refer to the ~~sequence No. 2~~ SEQ ID NO:2). The invention also encompasses fragments of the polypeptides according to the invention which are N-glycosylated. The fragments are at least 50 amino acids in length, preferably at least 100 amino acids and most preferably at least 150 amino acids. In another embodiment, a polypeptide can be O-glycosylated.

In the paragraph bridging pages 4 and 5 of the specification:

Depending on the method of preparation, the PRV-1 polypeptide can, for example, possess a glycosyl phosphatidylinositol anchor. This is then bonded to the amino acids which correspond to amino acids 407 to 409 in ~~sequence ID No. 2~~ SEQ ID NO:2. A GPI anchor is used to anchor a protein by means of a lipid on the outside of the cell membrane. However, for reasons which have not so far been conclusively elucidated, it is frequently observed that GPI-linked proteins are also released into the medium. This is referred to as

"shedding". To date, it has not been clarified whether this is a specific process, i.e. such proteins are cleaved from the membrane by enzymes in a controlled manner, or whether it represents a non-specific loss of the anchor. It is consequently very probable that PRV-1 is to be found both on the cell membrane and extracellularly. The secreted form, which is not membrane-bound, is probably more important for the effect of the polypeptide as a growth factor since, as a growth factor, this form is able to diffuse and reach other cells.

In the paragraph bridging pages 5 and 6 of the specification:

In order to be able to use the polypeptide encoded by the PRV-1 gene for analyses and detection methods, it is expediently generated from recombinant DNA, with the recombinant DNA preferably comprising the nucleotide ~~sequence ID No. 1~~ SEQ ID NO:1 or at least the coding region of the PRV-1 gene, that is nucleotides 36 to 1346 of ~~sequence ID No. 1~~ SEQ ID NO:1, at least, however, nucleotides 39 to 1262, functionally linked to a promoter. However, the recombinant DNA can also comprise only a fragment of ~~sequence No. 1~~ SEQ ID NO:1.

Page 17, last paragraph

Granulocytes were isolated from a patient suffering from p. vera, and protein extracts were prepared from these cells using a standard protocol. These protein extracts were treated in accordance with the protocol for the "N-Glycosidase F Deglycosylation Kit" supplied by Boehringer Mannheim. In detail, this means that a "denaturation buffer" was added to the protein extracts and the mixtures were heated at 95.degree. C. for 3 minutes, after which they were treated either with "reaction buffer" or with "reaction buffer" plus N-glycosidase. Each mixture was incubated overnight at 37.degree. C. and the proteins were analysed on a PAGE gel electrophoresis followed by a Western blot. The PRV-1 protein was detected with an antibody directed against a protein having the amino acid ~~sequence ID No. 5~~ SEQ ID NO:5. The results show that while PRV-1 protein purified from granulocytes is 60-65 kDa in size, it is only 40 kDa in size after having been digested with N-glycosidase. This clearly proves that PRV-1 is glycosylated on asparagine residues (asparagine=N).

At page 2 of the specification, after the 4th paragraph please insert the following:

SEQ ID NO:1

AAAAGCAGAAAGAGATTACCAGCCACAGACGGGTCAIGAGCGGGTATTACTGCTGGCCCTCC
TGGGGTTCATCCTCCCACTGCCAGGAGTGCAGGCGCTGCTCTGCCAGTTTGGGACAGTTCAGC
ATGTGTGGAAGGTGTCCGACCTGCCCGGCAATGGACCCCTAAGAACACCAGCTCCGACAGCG
GCTTGGGGTGCCAGGACACGTTGATGCTCATTGAGAGCGGACCCCAAGTGAGCCTGGTGCTCT
CCAAGGGCTGCACGGAGGCCAAGGACCAGGAGCCCCGCGTCACTGAGCACCGGATGGGCCCCG
GCCTCTCCCTGATCTCTACACCTTCGTGTGCCGCCAGGAGGACTTCTGCAACAACCTCGTTA
ACTCCCTCCCGCTTTGGGCCCCACAGCCCCCAGCAGACCCAGGATCCTTGAGGTGCCCACTCT
GCTTGTCTATGGAAGGCTGTCTGGAGGGGACAACAGAAGAGATCTGCCCCAAGGGGACCACAC
ACTGTTATGATGGCCTCCTCAGGCTCAGGGGAGGAGGCATCTTCTCCAATCTGAGAGTCCAGG
GATGCATGCCCCAGCCAGGTTGCAACCTGCTCAATGGGACACAGGAAATTGGGCCCCGTGGGTA
TGACTGAGAACTGCAATAGGAAAAGATTTTCTGACCTGTCATCGGGGACCACCATTATGACAC
ACGGAACCTTGGCTCAAGAACCCACTGATTGGACCACATCGAATACCGAGATGTGCGAGGTGG
GGCAGGTGTGTCAGGAGACGCTGCTGCTCATAGATGTAGGACTCACATCAACCTGGTGGGGA
CAAAAGGCTGCAGCACTGTTGGGGCTCAAAATTCCAGAAGACCACCATCCACTCAGCCCCCTC
CTGGGGTGCTTGTGGCTCCTATACCCACTTCTGCTCCTCGGACCTGTGCAATAGTGCCAGCA
GCAGCAGCGTTCTGCTGAACCTCCTCCTCCTCAAGCTGCCCCGTGCCAGGAGACCGGCAGT
GTCCTACCTGTGTGCAGCCCCCTTGAACCTGTTCAAGTGGCTCCCCCGAATGACCTGCCCCA
GGGGCGCCACTCATTGTTATGATGGGTACATTATCTCTCAGGAGGTGGGCTGTCCACCAAAA
TGAGCATTCAGGGCTGCGTGGCCCAACCTTCCAGCTTCTTGTGTAACCACACCAGACAAATCG
GGATCTTCTCTGCGCGTGAGAAGCGTGATGTGCGAGCCTCCTGCCTCTCAGCATGAGGGAGGTG
GGGCTGAGGGCCTGGAGTCTCTCACTTGGGGGGTGGGGCTGGCACTGGCCCCAGCGCTGTGGT
GGGGAGTGGTTTGGCCCTCCTGCTAAGCTCTATTACCCCCACGATTCTTCAECGCTGCTGACCA
CCCACACTCAACCTCCCTCTGACCTCATAACCTAATGGCCTTGGACACCAGATTCTTTCCCAT
TCTGTCCATGAATCATCTTCCCCACACACAATCATTATATCTACTACCTAACAGCAACT
GGGGAGAGCCTGGAGCATCCGACTTGCCTATGGGAGAGGGGACGCTGGAGGAGTGGCTGCA
TGATCTGATAATACAGACCCCTGTC

At page 4 of the specification, after the 2nd paragraph please insert the following:

SEQ ID NO:2

MSAVLLALLLGFILPLPGVQA---LLCQFGTVQHVWVSDLPQWTPKNTSCD
SGLGCQDTLMLIESGPQVSLVLSKGCTEAKDQEP RVTEHRMGPGLSLISY
TFVCRQEDFCNNLVNSLPLWAPQPPADPGSLRCPVCLSMEGCLEGTTEEI
CPKGTTHCYDGLLR LRGGGIFSNLRVQGCMPPQGCNLLNGTQEIGPVGMT
ENCNRKDFLTCHRGTTIMTHGNLAQEPTDWTTSNTEMCEVGQVCQETLLL
IDVGLTSTLVGKGCSTVGAQNSQKTTIHSAPPGVLVASYTHFCSSDLN
SASSSVLLNSLPPQAAPVPGDRQCPTCVQPLGTCSSGSPRMTCPRGATH
CYDGYIHLSGGGLSTKMSIQGCVAQPSSFLNHNTRQIGIFSAREKRDVQP
PASQHEGGGAEGLES LTWGVGLALAPALWGVVCPSC